AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A machine implemented method comprising:

accessing rows in a database table, wherein:

each row in the table corresponds to a dimension-value combination;

a database system defines, for said database table, a dimension column that contains dimension values;

each row in the table is stored in a [[block]] unit of contiguous storage; and

a location within a [[block]] unit of contiguous storage at which each row is stored is determined based on the dimension-value combination to which the row corresponds; and

wherein the accessing of the rows also includes, in response to receiving a request that indicates ~~for a row corresponding to~~ a particular dimension-value combination[[,]]:

using the particular dimension-value combination for calculating a value that represents the [[block]] unit of contiguous storage that stores [[the]] a particular row that corresponds to the particular dimension-value combination; and

using the value to access the particular row.

2. (currently amended) The method of claim 1, wherein:

the dimension value combination includes values for one or more dimensions[[,]]; and

the table does not include columns for storing values for the one or more dimensions.

3. (original) The method of claim 1, wherein said table includes a plurality of segments, and wherein each segment stores rows for a contiguous range of dimension value combinations.

4. (currently amended) The method of claim 3, wherein:
the method further comprising creating an indexed organized table that includes an entry for each segment in the plurality of segments; and
the calculating of a value that represents the block that stores the particular row is based in part on information contained in the entry that corresponds to the segment that contains the particular row.

5. (previously presented) The method of claim 3, wherein sizes of the plurality of segments and locations contained within the plurality of segments are allocated according to a density of discontinuities in ranges of dimension value combinations.

6. (currently amended) The method of claim 3, wherein:
the method further comprising accessing an indexed organized table that includes an entry for each segment in the plurality of segments; and
the calculating of a value that represents the block that stores the particular row is based in part on information contained in the entry that corresponds to the segment that contains the particular row.

7. (original) The method of claim 6, wherein the index organized table includes nonkey information used for determining locations of gaps in ranges of dimension value combinations that are between the segments.

8. (original) The method of claim 6, wherein at least one of the plurality of segments includes more than one contiguous range of dimension value combinations.

9. (original) The method of claims 6, wherein at least one of the plurality of segments comprises at least two contiguous range of dimension value combinations that are joined together by at least one dummy entry in the table, therein forming one contiguous range of dimension value combinations.

10. (original) The method of claim 6, wherein the at least two of the plurality of segments are each divided into blocks having a block size, and the block size of a first of the at least two of the plurality of segments is different from the block size of a second of the at least two of the plurality of segments.

11. (previously presented) The method of claim 5, wherein the indexed organized table includes an identification of a reference location for each segment of the plurality of segments from which offsets from the reference location are calculated to reach other locations in each of the segments.

12. (original) The method of claim 3, wherein each of the plurality of segments is divided into one or more blocks of equal size.

13. (original) The method of claim 1, wherein the accessing of the location of interest is also performed by at least accessing a table having an identification of a dimension value of a reference location included in the block from which offsets are calculated to other locations.

14. (original) The method of claim 13, wherein the reference location is an index value of a first of location within a segment that stores rows for a contiguous range of dimension value combinations.

15. (original) The method of claim 13, wherein the table having the identification is a B-tree index.

16. (original) The method of claim 13, wherein the table having the identification is a bit map index.

17. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 1.

18. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 2.

19. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 3.

20. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 4.

21. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 5.

22. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 6.

23. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 7.

24. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 8.

25. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 9.

26. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 10.

27. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 11.

28. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 12.

29. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 13.

30. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 14.

31. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 15.

32. (original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 16.

33. (cancelled)

34. (currently amended) A computer-readable medium that is readable by a database system, having stored therein at least:

a database table ~~storing~~ containing data items on the computer readable media that corresponds to locations associated with at least one dimension value;

wherein said database system defines a dimension column for said database table that contains dimension values;

wherein the data items are stored in ~~blocks of the table~~ units of contiguous storage in an order dictated by the dimension values to which the data items correspond; and

wherein the database table does not store values for the ~~particular~~ dimension column.

35. (currently amended) The computer-readable medium of claim 34, wherein all of the locations of the database table that [[have]] are associated with non-null dimension

values are organized into one or more segments, each segment including a contiguous region of data without discontinuities in the ~~dimensions~~ dimension values.

36. (currently amended) The computer-readable medium of claim 35, wherein the table has associated with it at least one dimension value combination:
that is associated with a null value; and
that is not included in any of the one or more segments.

37. (previously presented) The computer-readable medium of claim 36, wherein the computer-readable medium also has stored therein at least:
another table storing identifiers for determining the locations stored within each segment of the one or more segments.